

Report to Department of the Environment
and Heritage

Developmental Fishing for Native Oysters
in Tasmanian State Waters

April 2006



Tasmania

DEPARTMENT *of*
PRIMARY INDUSTRIES,
and WATER

**THE TASMANIAN NATIVE OYSTER FISHERY
ANNUAL REPORT TO THE DEPARTMENT OF THE ENVIRONMENT AND
HERITAGE, APRIL 2006**

Introduction

The extraction of native oysters from Tasmanian State waters was assessed against the Commonwealth *Guidelines for the Ecologically Sustainable Management of Fisheries* under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Wildlife Trade Declaration for the Tasmanian Native Oyster Fishery allows the export of product from the fishery for three years subject to the following conditions and recommendations.

Conditions on the approved Wildlife Trade Declaration for the Tasmanian Native Oyster Fishery

1. Operation of the fishery will be carried out in accordance with the Tasmanian Native Oyster fishery management regime in force under the Tasmanian *Living Marine Resources Management Act 1995*.
2. Reports to be produced and presented to the Australian Government Department of the Environment and Heritage annually, and to include:
 - a) A description of the fishery, including catch and effort information and results of the annual fishery appraisal undertaken by DPIW;
 - b) Results of any research or surveys undertaken within the year; and
 - c) An outline of progress in implementing the recommendations made in the Assessment of the Tasmanian Native Oyster Fishery 2004.

Recommendations to the Tasmanian Department of Primary Industries and Water (DPIW) on the ecologically sustainable management of the Tasmanian Native Oyster Fishery.

1. DPIW to inform DEH of any changes to the management arrangements that may impact on the sustainability of the Native Oyster Fishery.
2. DPIW to develop and implement a precautionary reference point and corresponding management response, sufficient to trigger a response to major changes in harvest of the target species.
3. DPIW to conduct a re-survey of the stock structure and density of native oysters on the main beds in Georges Bay every two years.

This report is produced as a requirement of Condition 2 of the Wildlife Trade Declaration for the for the Tasmanian Native Oyster Fishery and addresses the recommendations to the Tasmanian Department of Primary Industries and Water (DPIW) on the ecologically sustainable management of the Tasmanian Native Oyster Fishery.

REPORT ON THE DECLARATION OF TASMANIAN NATIVE OYSTER FISHERY AS AN APPROVED WILDLIFE TRADE OPERATION

CONDITION 2(a)

- a) A description of the fishery, including catch and effort information and results of the annual fishery appraisal undertaken by DPIW;

The fishery is classified as developing and management is by issue of a permit under the *Living Marine Resources Management Act 1995*. Controls imposed on the fishery are precautionary in nature and executed by permit condition. The long term viability of the fishery is still being assessed, based on catch data, survey and research results and marketing information gathered from fishers and processors.

The fishery's low impact harvest method results in minimal impact on oyster habitat, and its wider ecosystem generally. The level of bycatch occurring in the fishery is considered insignificant. The oysters concentrate into large beds which are distributed within the main navigation channel of the entrance to Georges Bay, St Helens. Three of the five known beds are the beds surveyed to determine the biomass of the fishery, the Main Bed, Eastern Bed and the Akaroa Bed, (Attachment 2).

The two divers harvested between 800 – 2000 dozen during this year by hand, with the majority of the catch being taken by one diver (see Table 1). Of the total allowable catch for 2005 of 9200 dozen oysters, only 2929 dozen oysters were taken, a considerable reduction from the 5295 dozen taken in 2004. This reduction was in part due to the principal harvester not being able to consistently participate in the fishery and the movement of the harvesters away from reliance on external processing to self managed sales.

The fisher who had not previously been actively participating in the fishery was allocated a total of 1200 dozen oysters for 2005, consisting of two allocations of 600 dozen oysters issued at six monthly intervals.

The principal harvester requested a reduction in his allocation to 5000 dozen oysters for 2006.

Table 1. Harvesting History Native Oysters Georges Bay

CATCH BY YEAR (DOZ)			
1994	3595	2000	0
1995	200	2001	1687
1996	0	2002	5215
1997	2845	2003	5595
1998	8594	2004	5295
1999	2090	2005	2929
		Total	38045

Catch and effort information for the fishery during 2005 was collected from Daily Flat Oyster fishery logbooks, (Attachment 1) that are returned within 24 hours of taking any oysters. Previously calculations for catch and effort data were in dozens of oyster taken hourly. After reviewing the fishing data and because a new format of logbook is being introduced, that does not have provision for the reporting of fishing time, the measure of catch per unit effort (CPUE) will be changed to dozens of oysters taken per day. This will alleviate any error resulting from the fisher providing an estimate of time fished and occasionally not reporting fishing time when sending in returns.

The trend in the data, using both methods, indicates that the CPUE declined moderately during 2005 (Figure 1). This trend is not seen as a serious concern at this time, as there are many variables within the fishery and factors independent of the fishery which may influence the divers fishing behaviour during the permit period. Also, the use of CPUE as an indicator of stock abundance is less accurate than for larger fisheries because there are only two divers participating, and one fisher takes the majority of oysters. However, DPIW has noted this movement in the data and will continue to monitor the fishery to establish whether there are any significant issues affecting the CPUE. CPUE data will also be examined in conjunction with survey data to be collected in 2007.

Year	Days fished	Nos. Landed (Dozen)	Day CPUE
1994	17	3795	223.2
97/98	99	11439	115.5
1999	21	2090	99.5
2001	57	2682	47.1
2002	77	3413	44.3
2003	75	5555	74.1
2004	62	5210	84.0
2005	50	2929	58.6

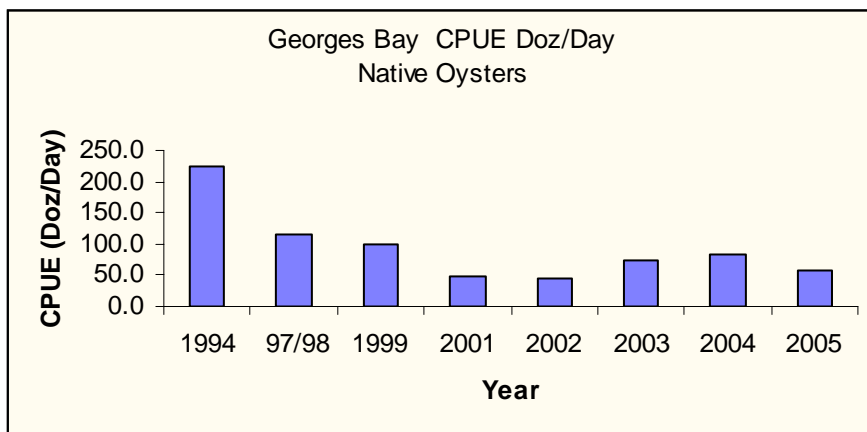


Figure 1

Result of the annual fishery appraisal:

The annual fishery appraisal was conducted by DPIW in February 2006. The management strategy for the fishery was examined to appraise the impacts of the fishery on the stock, environment, compliance and overall commercial viability of the fishery. There were no major changes made to the management of the fishery, with

the exception that fishery information is to be collected using the recently introduced commercial dive docket book system, replacing the existing log book.

CONDITION 2(b)

(b) Results of any research or surveys undertaken within the year;

Surveys of the Native Oyster bed are not due to be undertaken until 2007. Fishery information is collected and monitored regularly to ascertain any significant changes in effort within the fishery.

CONDITION 2(c)

b) An outline of progress in implementing the recommendations made in the Assessment of the Tasmanian Native Oyster Fishery 2004

1. DPIW to inform DEH of any changes to the management arrangements that may impact on the sustainability of the Native Oyster Fishery.

There have not been any major changes to the management arrangements of the native oyster fishery in Georges Bay that may impact on its sustainability.

2. DPIW to develop and implement a precautionary reference point and corresponding management response, sufficient to trigger a response to major changes in harvest of the target species.

Two reference points were implemented in the 2005 report that require action regarding the taking of the target species.

These are:

- a) when the biomass is determined as 40% of the unfished stock of 900,000 dozen, which equates to 360,000 dozen oysters,
- b) the biomass is equivalent to 50% of the preceding biomass estimate. The estimated biomass in 2005 was 784,686 dozen oysters on the three beds, therefore the reference point equated to 392,343 dozen oysters.

Surveys of the Native Oyster beds are not due to be undertaken until 2007. Should concerns regarding the biomass arise before 2007, DPIW will review of the fishery to determine the reasons for the decline and consider the appropriate coarse of controls to maintain an ecologically sustainable fishery.

3. DPIW to conduct a re-survey of the stock structure and density of native oysters on the main beds in Georges Bay every two years.

The initial survey of the three major beds was conducted in April 2003. These beds were recently surveyed in April 2005 and are therefore not due to be re-surveyed until 2007.